NEW AND LITTLE KNOWN DOLICHOPODIDAE FROM THE PACIFIC NORTHWEST AND INTERMOUNTAIN AREAS
(DIPTERA)

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The following descriptions of new Dolichopodidae are based upon specimens collected by the writers and those received from the following persons: Dr. Charles P. Alexander, University of Massachusetts; Mr. Kenneth Goeden, Oregon State Department of Agriculture; and Mr. Roy J. Myklebust, Washington State Department of Health.

Campsicnemus alaskensis, n. sp.

Male. Length, 1.8 mm.; of wing, 2.6 mm. Face yellowish pollinose, narrow at the middle where the eyes are narrowly separated, broader on lower portion. Front metallic, outer portions violet, somewhat dulled with gray pollen. Palpi pollinose, brown. First and second segments of antennae yellow, strongly contrasting with the black third segment which is pubescent, triangular, slightly longer than wide. Arista dorsal, inserted at base of third segment, twice the length of antenna. Lower postocular cilia white, a few of the upper cilia black.

Thorax and abdomen black, dulled with grayish pollen. Hypopygial appendages embedded. Fore coxae yellow, the anterior surface with pale hairs and bristles; middle and hind coxae black, the former with pale hairs on anterior surface. Femora and tibiae yellow, of plain structure. Tarsi yellow, infuscated from tip of the first segments. Halteres and calypters yellow, the latter with black cilia.

Wings grayish hyaline, of rather uniform width, without a spot on last portion of fourth vein.

Described from 1 male collected by Dr. C. P. Alexander, at Clam Beach, Sterling Highway, Alaska, August 3, 1954. Holotype male to be deposited in the California Academy of Sciences, San Francisco, California.

Campsicnemus oregonensis, n. sp.

Male. Length, 2 mm.; of wing, 2.3 mm. Face narrow, the eyes nearly contiguous at middle, velvety-brown. Front brilliant metallic, blue-violet. Palpi black. Antennae black; third segment as broad as long, pubescent, rounded at tip. Arista dorsal, inserted at base of third segment. Lower postocular cilia white, the upper cilia black.

Thorax metallic, black; scutellum with violet reflections, with one pair of bristles and four evenly spaced hairs on the margin; pleurae grayish, pollinose. Abdomen black with greenish-bronze reflections, lightly dusted with grayish pollen. Hypopygium embedded, the appendages clothed on posterior surface with delicate pale cilia.

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Fore coxae yellow on anterior surface, bright silvery pollinose when viewed from the front, the outer and basal portions dark; anterior surface with delicate pale hairs and several black bristles at tip. Middle and hind coxae black. Femora yellow, the fore pair brownish-black on basal half, especially on upper surface. Middle femora with long sharp bristles on lower surface. Middle tibiae decidedly flattened on apical half; inner surface bearing two rows of evenly spaced blunt brisles on basal half, those in the posterior row nearly twice the length of those in the other row; outer surface noticeably thickened near the middle, the apical half concave and glabrous which gives a flattened appearance, the tip enlarged and with a deep notch above the point of attachment of basitarsus; outer surface with two large bristles inserted at middle at the thickest part of tibia and bearing a compact cluster of four to five short black bristles between the bases of the large bristles. Tarsi black from about the middle of the first segments; fore and hind tarsi of plain structure. Middle basitarsi moderately bent, terminating in a strong black thorn, fringed along outer edges with black hairs, those on posterodorsal edge almost one-half the length of basitarsus. Halteres and calypters yellow, the latter with black cilia.

Wings grayish hyaline, last portion of fourth vein with a faint brownish spot near basal third.

Female. Similar to the male in general coloration of body and legs; face much wider, the portion immediately below the antennae and that below the suture brownish pollinose, the middle portion grayish.

Described from 5 males and 1 female collected by the junior author at Barview State Park, Oregon, March 12, 1963. Holotype male and allotype female to be deposited in the California Academy of Sciences; paratype males in the U.S. National Museum, Oregon State Board of Health, and collection of the senior author.

Campsicnemus alexanderi, n. sp.

Male. Length, 2.2 mm.; of wing, 2.5 mm. Face yellowish pollinose. Front lightly dusted with yellow pollen, the violet ground color evident. Antennae black; third segment pubescent, elongate-triangular, approximately twice as long as wide; arista dorsal, inserted at basal corner. Postocular cilia white, the upper cilia black. Palpi black.

Dorsum of thorax metallic black, with greenish-bronze reflections, dusted with yellow pollen; scutellum with a single pair of large marginal bristles and a row of four evenly spaced hairs on posterior margin. Abdomen concolorous with thorax. Hypopygium dusted with gray pollen; appendages embedded.

Fore coxae yellow, infuscated at base on outer side, the anterior surface with delicate white hairs and with black bristles at tip and along the outer side near apex; middle and hind coxae black. Femora yellow, the basal third of all pairs black on lower surface. Anterior femora with a few long delicate pale hairs on basal half of lower edge; middle femora bearing a row of sharp black bristles along the posterior margin of lower edge which are about as long as the diameter of femora, and a row of similar, but shorter, bristles along the bottom edge of femora. Tibiae yellow; middle tibiae with a row of evenly spaced, long, stout, blunt bristles along entire posteroventral surface which are longer than the diameter of tibiae, and a row of shorter sharp bristles along the

outer edge. Tarsi brownish, of plain structure. Halteres and calypters yellow, the latter with black cilia.

Wings grayish hyaline, without a spot on the last portion of fourth vein.

Described from 3 males collected by Dr. C. P. Alexander, at Mile Post 49, Taylor Highway, W. Fork Dennisan River, Alaska, August 13, 1954. Holotype male to be deposited in the California Academy of Sciences; paratypes in the U.S. National Museum and the collection of the senior author.

Campsicnemus coloradensis, n. sp.

Male. Length, 2 mm.; of wing, 2.5 mm. Face black, narrow on middle portion where the eyes are narrowly separated. Front black, metallic. Palpi black. Postocular cilia wholly black. Antennae black; third segment broader than long, apex rounded, pubescent. Arista dorsal.

Dorsum of thorax black, with bronze-green reflections; scutellum with a pair of large bristles and six evenly spaced hairs on the posterior margin. Pleurae concolorous with dorsum. Abdomen and hypopygium black, the latter embedded.

Coxae, femora, tibiae, and tarsi black. Anterior surface of fore and middle coxae with black hairs and bristles. Middle femora with two rows of divergent bristles on lower surface which are nearly as long as the diameter of femur. Middle tibiae slightly bowed, flattened; inner surface with two rows of blunt bristles on basal half which merge into a row of about four longer pointed bristles, the apical fourth nearly bare on inner surface. Outer surface of middle tibiae densely clothed with long bristles many of which are as long as the hind basitarsus. Middle basitarsi about three-fourths the length of second segment, bowed, ending in a stout, black, horn-like projection, the posterior surface with black hairs that are about one-half the length of segment. Second to fifth segments of middle tarsi and the fore and hind tarsi of plain structure. Halteres black; calypters dark brown with black cilia.

Wings dark grayish, hyaline; posterior cross-vein and the small depression on distal portion of fourth vein slightly infuscated.

Female. Face wider than in the male. Middle legs of plain structure. Coloration of body, legs, and wings as in male.

Described from 1 male and 2 females collected by the senior author at Ward, Colorado, June 21, 1962. Holotype male and allotype female to be deposited in the California Academy of Sciences; paratype female in collection of the senior author.

Syntormon myklebusti, n. sp.

Male. Length, 2.8 mm. Face narrow, silvery pollinose. Front blue, metallic. Palpi black. Antennae black; third segment about as long as the first segment of fore tarsi, the basal two-fifths wide, from which point the segment is abruptly narrowed on both upper and lower edges with the apical three-fifths parallel-sided and ending in a blunt point.

Arista almost apical, yet inserted slightly above the tip of segment. Lower postocular cilia pale, the upper cilia black.

Dorsum of thorax bronzy-green, lightly dusted with white pollen; pleurae densely whitish pollinose. Abdomen dark green. Hypopygium black, bearing

a pair of small brownish, spoon-like lamellae, their outer surfaces clothed with brownish hairs.

Fore coxae brownish; middle and hind pairs black. Femora and tibiae yellow, the hind tibiae brownish at apex. Middle tibiae with a row of three long, slender, black bristles at the middle on lower edge. Fore tarsi dark from tip of second segment; first segment enlarged at tip below. Middle tarsi of plain structure. Hind basitarsi swollen, bearing a comb of dense, stiff, yellow bristles at tip on inner edge which overlies a small projection bearing a short black bristle at tip; second segment about as long as third, bearing a densely haired prolongation on lower portion which extends beyond the point of attachment of third segment. Halteres and calypters brownish-yellow, the latter with narrow black margin and dark brown cilia.

Wings gray, hyaline.

Female. Face nearly three times as wide as in male, yellowish-gray pollinose. Front blue, metallic. Third segment of antennae short, rounded at tip, the arista dorsal. Coxae, femora, and tibiae yellow. Tarsi dark from the tip of second segments. Metepimeron and venter of abdomen yellow.

Described from 1 male and 2 females collected at Ilwaco, Washington, July 19, 1960, by Mr. R. J. Myklebust in whose honor the species is named. Holotype male and allotype female to be deposited in the California Academy of Sciences; paratype female in the collection of the senior author.

Systenus oregonensis, n. sp.

Male. Length, 2 mm.; of wing, 2.5 mm. Face and front whitish, the former narrow and barely separating the eyes on lower portion. Antennae brown; third segment tending toward black, triangular, about the length of third segment of fore tarsi, the tip blunt, densely pubescent. Arista apical about twice the length of third segment. Palpi yellow, the upper surface with black hairs and with a prominent black bristle at tip. Lower postocular cilia white, the upper cilia black.

Dorsum of thorax and scutellum brown, sparsely whitish pollinose; upper portions of pleurae dark brown, the lower half yellow. Abdomen black, with black bristles. Hypopygium rounded; lamellae yellow, triangular, about the length of fifth segment of fore tarsi, bearing a few short black hairs on margin.

Coxae yellow, the middle pair with a narrow brown stripe near the middle; fore and middle pairs with black hairs and bristles on anterior surface, the middle and hind pairs with a large black bristle on outer surface. Femora, tibiae, and tarsi yellow, the latter slightly infuscated toward the tips; fore femora with a long, slender, black bristle inserted at basal third on lower edge which is as long as the diameter of femora; middle femora with a single anterior preapical bristle; hind femora with two anterior preapicals, the lower one inserted near lower edge of femora. Halteres with yellow stem, the knob brown; calypters yellow with black cilia.

Wings grayish, hyaline; third and fourth veins strongly divergent on apical portions, their tips separated by a distance equal to the length of posterior cross-vein.

Described from 2 males; the holotype collected by Mr. Kenneth Goeden, sweeping plants in marsh at Wilsonville, Oregon, July 3, 1963; paratype collected at Troutdale, Oregon, June 23, 1963, by the junior author. Holotype to be deposited in the California Academy of Sciences; paratype in the U.S. National Museum.

Systenus utahensis, n. sp.

Male. Length, 2.2 mm.; of wing, 2 mm. Face and front with dense grayish pollen, the former narrow on lower portion. Palpi yellow, the upper surface with sparse black hairs and a prominent black bristle at tip. Antennae yellowish to about the middle of third segment which is brown on apical half; third segment triangular, the tip rounded, about the length of third segment of fore tarsi, pubescent. Arista apical, twice the length of antenna. Lower postocular cilia pale, the upper cilia black.

Thorax and pleurae wholly yellowish, the latter with a small, triangular, black spot immediately below halter. Bristles of thorax strong, black. Abdomen dark brown, venter yellowish, the hairs and bristles black. Hypopygial lamellae yellow, ribbon-like, broad at base, tapering to a sharp point, about the length of the first segment of fore tarsi, the margins fringed with long pale hairs.

Legs, including coxae, yellow; fore and middle coxae with black hairs and bristles on anterior surface; hind coxae with a black bristle on outer surface at middle. Fore femora with a prominent, slender, sharp bristle inserted at basal third on lower edge which is as long as the diameter of femora at point of attachment. Halteres and calypters yellow, the latter with black cilia.

Wings grayish, hyaline; distal portions of third and fourth veins parallel.

Described from 2 males collected in moist cavity of cottonwood tree, Moab, Utah, August 4, 1957, by the senior author. Holotype male to be deposited in the California Academy of Sciences; paratype male in U.S. National Museum.

Parasyntormon caudatum (Van Duzee), n. comb.

Sympycnus caudatus Van Duzee, Canad. Ent., 49:338, 1917.

The structure of fore tarsi, clubbed inner appendages of hypopygium, and presence of a pair of stout, rod-like appendages extending from the venter of fifth abdominal segment in *caudatus* are characteristic of *Parasyntormon* rather than *Sympycnus*.

Sympycnus nodatus Loew

Sympycnus nodatus Loew, Dipt. Amer. Sept. Indig., II: 85, 1861.

Sympycnus (*Calyxochaetus*) *abbreviatus* Van Duzee, Canad. Ent., 49: 341, 1917.

Van Duzee's type specimen of *abbreviatus* was damaged and the true structure of the arista and the middle tarsi was not determined. The presence of the long slender bristle on inner surface of hind tibia at basal third identifies the species as *nodatus*.

Sympycnus rotundus n. name

Sympycnus calcaratus Parent, Ency. Ent., Ser. B., Dipt., 6:43, 1932.

This change in name for Parent's species is necessary in view of *Sympycnus calcaratus* Van Duzee, described in 1930, Pan-Pac. Ent., 7(1):41.

Sympycnus parenti n. name

Sympycnus cilifemoratus Parent, Ency. Ent., Ser. B., Dipt., 6: 42, 1932.

This change in name for Parent's species is necessary in view of *Sympycnus cilifemoratus* Van Duzee (described as *Nothosympycnus*), Proc. U.S. Nat. Mus., 63(21): 12, 1923.

THE CORRECT NAME FOR AN ANTHOCORID PREDATOR OF THE CUBAN LAUREL THRIPS

(HEMIPTERA: ANTHOCORIDAE)

The following synonymy is presented for the benefit of biological control workers concerned with the control of the Cuban laurel thrips, *Gynaikothrips ficorum* (Marchal).

Montandoniola moraguesi (Puton)

Montandoniella moraguesi Puton, 1896, Rev. d'Ent. 15: 232.

Montandoniola moraguesi (Puton), Poppius, 1909, Acta Soc. Sci. Fenn. 37 (9): 30.

Montandoniola thripodes Bergroth, 1916, Proc. U. S. Nat. Mus. 51. (2150): 233. (Holotype from Hong Kong in USNM No. 20153) **NEW SYNONYMY**.

Ectemnus pictipennis Esaki, 1931, Ann. Zool. Jap. 13: 264.

E. pictipennis was made the type of a new genus, *Teisocoris* by Hiura (1959, Bull. Osaka Mus. Nat. Hist. 11: 1). Carayon (1961, South African Animal Life 8: 543) synonymized this genus with *Montandoniola* and its type-species with *moraguezi*. In this same paper, he predicted the above synonymy of *thripodes*, which I have confirmed by examination of the type.

M. moraguesi occurs over much of the same range as *Gynaikothrips*. It is known from France, Italy, Spain, Portugal, Africa, India, the Orient and western Micronesia. It is not known from the New World.

This predator was introduced from the Philippines into the Hawaiian Islands in mid-1964 after the Cuban laurel thrips was discovered at the Honolulu International Airport in January of that year. Dr. C. J. Davis states (*in litt.*) that *Montandoniola* is doing an outstanding job of controlling *ficorum* in Hawaii. Whereas most of the banyan leaves (*Ficus retusa*) dropped off the trees following heavy infestations prior to the introduction of the anthocorid; now most of the leaves recover as a result of effective thrips control by this bug. JON L. HERRING, *Entomology Research Division, ARS, U.S. Department of Agriculture, Washington, D.C. 20560.*